

**Recovery Plan Action Status****Plan Name: Blackside Dace****Plan Status: Final****Plan Date: 17-Aug-88****Lead Agency: USFWS****Lead Office: Kentucky Ecological Services Field Office****(502)****695-0468 )**

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Blackside dace (Phoxinus cumberlandensis)	1	1.1	Continue to utilize existing legislation and regulations to protect the fish and its habitat.	Ongoing Current	Prior to FY 1995		National Park Service, U.S. Forest Service, Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Management: General, Other: Regulations	Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert	*All cost estimates are for FWS funds only.

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Blackside dace (Phoxinus cumberlandensis)	2	1.2.1	Coordinate with other agencies to identify and protect critical populations for recovery.	Ongoing Current	Prior to FY 1995		National Park Service, U.S. Forest Service, Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Management: General	Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Blackside dace (Phoxinus cumberlandensis)	2	1.2.2	Meet with local governmental officials and business interests and elicit their support for recovery.	Not Started			Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Work type not yet selected	Labor type not yet selected	This includes task 1.2.3.

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Blackside dace (Phoxinus cumberlandensis)	1	1.2.4	Develop information and education programs and present.	Partially Complete	FY 2006		Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Other: Information and Education	Internal Technical Assistance	Presentations about blackside dace biology, distribution, conservation at KY Master Logger Certification courses - 6 presentations since Oct. 2005; BSD article published in "Logjam" - KY timber industry newsletter (Fall/Winter 2005, vol. 9, issue 3). Distribution maps for KY/TN are being produced by KSNPC, UK, and KFO for use at Master Logger courses and distribution by KDOF offices.
Blackside dace (Phoxinus cumberlandensis)	2	1.3.1	Conduct research necessary for species management and recovery	Ongoing Current	FY 2000 - FY 2004		National Park Service, U.S. Forest Service, Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Research: Demographic Studies, Research: General, Research: Habitat Requirements, Research: Habitat Status, Research: Management Techniques, Research: Migration, Research: Population Surveys	Contract, Graduate Student, Species Expert	This includes tasks 1.3.2 and 1.3.3.; Research conducted by Tennessee Technological University (Dr. Hayden Mattingly) - research began in June 2002 and continues to present - has included 3-4 graduate students and consisted primarily of distributional studies and research on spawning behavior/substrate

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Blackside dace (Phoxinus cumberlandensis)	2	1.3.4	Based on biological data and threat analysis, investigate the need for management and implement where needed.	Ongoing Current	FY 2007		National Park Service, U.S. Forest Service, Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Fish and Wildlife Enhancement, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Acquisition, Management: Habitat Maintenance and Manipulation, Management: Population Monitoring, Research: Population Assessment, Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	The KY Ecological Services Field Office (KFO) worked cooperatively in 2006/07 with a number of federal and state partners (NRCS, Univ. Louisville, KDFWR, etc.), as well as four private landowners, to initiate an approximate 2,300-foot restoration project on Mill Branch in Knox County, Kentucky. Mill Branch is a second order tributary of Stinking Creek that had been degraded through channelization of the mainstem, removal of riparian vegetation, over-grazing of adjacent pastures, and placement of culverts within the stream channel. Blackside dace had persisted within the stream, but population numbers were low compared to other streams within its range. The proposed project was designed to alleviate these problems by restoring instream and riparian habitats for the species using "natural channel design" techniques. The project continues to be monitored both physically and biologically. The restored stream is stable, and blackside dace are using portions of

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										the restored reach.
Blackside dace (Phoxinus cumberlandensis)	3	1.3.5	Determine number of individuals required to maintain viable population.	Partially Complete	FY 1995 - FY 1999		Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Research: Genetics	Contract, Species Expert	Costs are unknown; research conducted by Strange & Burr (1995) - Genetic variability and metapopulation dynamics in the federally threatened blackside dace - conducted for KDFWR with Sect. 6 funds
Blackside dace (Phoxinus cumberlandensis)	3	2	Search for additional populations and suitable habitat.	Ongoing Current	Prior to FY 1995		U.S. Forest Service, Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Research: Population Surveys	Contract, Graduate Student, Species Expert	Initial collections conducted by KNPC throughout the upper Cumberland River basin (1993-1994); additional surveys conducted by Mattingly et al. (Tenn Tech) beginning in June 2002; other surveys completed by KDFWR or consultants as part of mining permits, road projects, or other development activities.

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Blackside dace (Phoxinus cumberlandensis)	3	3	Develop techniques, select sites, reintroduce the species back into historic habitat, and evaluate and protect any populations established.	Not Started			National Park Service, U.S. Forest Service, Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Work type not yet selected	Labor type not yet selected	
Blackside dace (Phoxinus cumberlandensis)	3	4	Develop and implement a monitoring program.	Ongoing Current	FY 2000 - FY 2004		U.S. Forest Service, Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Research: Demographic Studies, Research: Population Surveys	Contract, Graduate Student, Species Expert	Work initiated in June 2002 by Tenn Tech, Dr. Hayden Mattingly et al.

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Blackside dace (Phoxinus cumberlandensis)	3	5	Annually assess recovery program and modify program and plan where required.	Not Started			National Park Service, U.S. Forest Service, Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Fish and Wildlife Enhancement, Kentucky Department of Fish and Wildlife Resources, Kentucky Department for Surface Mining Reclamation and Enforcement, Office of Surface Mining, Tennessee Heritage Program, USFWS Regional Office 4, Kentucky Nature Preserves Commission	Work type not yet selected	Labor type not yet selected	